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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,772	06/30/2003	Wade L. Hennessey	6783P101	2185
8791 7590 12/14/2007 BLAKELY SOKOLOFF TAYLOR & ZAFMAN 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040			EXAMINER LEVITAN, DMITRY	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 12/14/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/611,772	<b>Applicant(s)</b> HENNESSEY ET AL.	
	<b>Examiner</b> Dmitry Levitan	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*Specification*

1. The disclosure is objected to because of the following informalities: reservation space for the application number on page 1.

Appropriate correction is required.

2. The disclosure is objected to, because abbreviations or acronyms MO ID, PKI, OEF and IP/X are cited throughout the specification without explanation. Applicant should provide a full explanation for the acronyms at least at their first occurrence in the specification.

*Claim Rejections - 35 USC § 101*

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 8-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 8 limitations, directed to “computer-readable storage medium” comprise carrier wave according to the specification on page 6, which is not a statutory subject.

See Interim Guidelines for examination of patent applications for patent subject matter eligibility, pages 50-54.

Claims 9-14 are rejected as the claims depending on the rejected claim 8.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 8 and 15 recite the limitation "the path" in line 4 of claim 1 and lines 6 of claims 8 and 15. There is insufficient antecedent basis for this limitation in the claim.

Claims 1, 8 and 15 recite the limitation "the routers" in line 6 of claim 1 and lines 8 of claims 8 and 15. There is insufficient antecedent basis for this limitation in the claim.

Claims 3, 10 and 17 recite the limitation "the MAC address" in line 2 of claim 3 and lines 3 of claims 10 and 17. There is insufficient antecedent basis for this limitation in the claim.

Claims 6, 13 and 20 recite the limitation "the first public address" in line 2 of claim 6 and lines 3 of claims 13 and 20. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 5, 6, 8, 12, 13, 15, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goeller (US 7,200,658) in view of Admitted Prior Art (current application, Background).

9. Regarding claims 1, 5, 8, 12, 15 and 19 Goeller substantially teaches the limitations of the claims:

A method a program and an apparatus for determining a network topology in a network (identifying a client computer location in a packet network by an application server, as disclosed on 2:12-25), comprising:

performing a tracerouting operation to obtain a traceroute from a first client to a server, wherein a traceroute is a map of the path through which a packet travels between the first client and the server, including addresses of the routers through which the packet travels (performing traceroute command from a client computer to the known server and collecting the path information 2:25-50);

sending the traceroute to the server from the first client (transmitting the traceroute information to the Internet server 2:46-49); and

using the traceroute at the server to build a router graph, wherein the router graph represents the topology of the network (identifying the hops from the client to the server, wherein the identified hops represent the topology of network, as disclosed on 3:17-35).

Goeller does not teach using his method, or system in peer-to-peer network environment.

Admitted Prior Art teaches importance of topology discovery in a peer-to-peer network for fast peer-to-peer content delivery, as disclosed in [0005]-[0007] of current application.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the system of Goeller in the field of peer-to-peer networks of Admitted Prior Art to utilize the topology discovery of the system in fast developing peer-to-peer networks.

In addition, regarding claims 8 and 15, Goeller teaches his method implementation as a software loaded into client and server computers and comprising mechanisms/means to perform the functions as described above.

10. Regarding claims 6, 13 and 20 Goeller teaches using the first public hop to the client to classify the clients into a member of group, as shown on Fig. 5 and 5:56-6:32 and therefore using the same router identified by the public address.

11. Claims 2, 9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goeller in view of Admitted Prior Art.

Goeller in view of Admitted Prior Art substantially teaches the limitations of claims 2, 9 and 16 (see claims 1, 8 and 15 rejection above).

Goeller in view of Admitted Prior Art does not teach performing tracerouting operation from client to client and sending this information to the server.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add performing tracerouting operation from client to client and sending this information to the server to the system of Goeller in view of Admitted Prior Art to improve the topology discovery by utilizing the same method, tracerouting, to provide additional topology information for the mapping of the network.

12. Claims 7, 14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goeller in view of Admitted Prior Art.

Goeller in view of Admitted Prior Art substantially teaches the limitations of claims 7, 14 and 21 (see claims 1, 8 and 15 rejection above), in addition Goeller teaches the importance of dynamic characteristic of the network 1:36-46.

Goeller in view of Admitted Prior Art does not teach removing information from the routing graph if the information has not been validated for specified period of time.

Official notice is taken that removing information from the routing graph if the information has not been validated for specified period of time is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add removing information from the routing graph if the information has not been validated for specified period of time to the system of Goeller in view of Admitted Prior Art to remove old routing information from the dynamic system.

***Allowable Subject Matter***

13. Claims 3, 4, 17 and 18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571) 272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Handwritten signature of Dmitry Levitan, consisting of stylized initials 'DL' followed by a cursive name.

Dmitry Levitan  
Primary Examiner  
Art Unit 2616

**DMITRY LEVITAN  
PRIMARY EXAMINER**